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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHIGEO AZUMA

Appeal 2009-003902
Application 10/726,443¹
Technology Center 2600

Decided: September 14, 2009

Before MAHSHID D. SAADAT, MARC S. HOFF,
and THOMAS S. HAHN, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The real party in interest is International Business Machines Corporation.

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from a Final Rejection of claims 1, 3, 5-7, 10, 11, 13, and 19. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellant's invention relates to a method and apparatus for machine translation of specific words during a collaborative session, wherein the apparatus includes a dictionary management unit for managing a dictionary file that creates a temporary dictionary for the corresponding collaborative session. The temporary dictionary, which is a virtual dictionary file used in a translation process, is created when the session begins and deleted when the session ends. A translation processing unit translates a text message by referring to the dictionary file which includes the temporary dictionary and other dictionary files, such as a user dictionary and other resident dictionary files (Abstract, Spec. ¶ [015])

Claim 1 is exemplary:

1. A translation server for translating an entered text and providing a translated text during a collaborative session, comprising:
a translation processing unit for executing a text translation process;
and
a dictionary storage unit for storing a general dictionary file referred to in the text translation process and a virtual dictionary file created at the start of the collaborative session for use in the text translation process only during the collaborative session, said virtual dictionary file being erased from said dictionary storage unit at the end of the collaborative session.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Nishino
Shimohata

US 5,295,068
US 7,031,906 B2

Mar. 15, 1994
Apr. 18, 2006

Claims 13 and 19 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1, 3, 5-7, 10, 11, 13, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishino in view of Shimohata.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Appeal Brief (filed February 13, 2008) and the Examiner's Answer (mailed April 30, 2008) for their respective details.

ISSUES

Appellant contends that the computer usable medium disclosed in the Specification does meet the requirement for functional descriptive material, i.e., when recorded on the computer usable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases, since the use of technology permits the function of the descriptive material to be realized (App. Br. 7). Appellant contends that there is no logical basis for combining Nishino and Shimohata since Nishino teaches the use of a temporary dictionary file for *email* messages and Shimohata teaches the use of a dictionary for translation during a collaborative (*chat*) session (App. Br. 5 (emphasis added)).

The Examiner finds that a mere computer readable medium, that is not specifically storage medium, can be interpreted as a magnetic carrier wave, which is non-statutory under 35 U.S.C § 101. Additionally, the Examiner finds that since Nishino teaches a translation processing unit and a dictionary storage unit that includes a virtual dictionary file, wherein the dictionary storage unit is created when the session begins and erased when the session ends and Shimohata teaches a collaborative session that populates a

dedicated dictionary for use of each chat group, that the combination of both teachings discloses the claimed invention (Ans. 4-5, 15-16; FF 2, 3).

Appellant's contentions present us with the following two issues:

1. Did Appellant show that the Examiner erred in finding that the scope of claims 13 and 19 is intended to include embodiments where the 'computer usable medium' may include a carrier wave or signal, both of which are non-statutory subject matter?

2. Did Appellant show that the Examiner erred in finding that the combination of Nishino and Shimohata discloses a translation server for translating entered text during a collaborative session using a dictionary storage unit that includes a virtual dictionary file created at the start of the collaborative session and erased from the dictionary storage unit at the end of the collaborative session?

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

The Invention

1. According to Appellants, the invention concerns a method and apparatus for machine translation of specific words during a collaborative session, wherein the apparatus includes a dictionary management unit for managing a dictionary file that creates a temporary dictionary for the corresponding collaborative session. The temporary dictionary, which is a virtual dictionary file used in a translation process, is created when the session begins and deleted when the session ends. A translation processing unit translates a text message by referring to the dictionary file which

includes the temporary dictionary and other dictionary files, such as a user dictionary and other resident dictionary files (Abstract, Spec. ¶ [015]).

2. The hardware configuration may include several storage media: main memory 103, hard disk 105, floppy/disk drive 109 and various other hardware configurations such as, a CD-ROM or DVD-ROM drive (Spec. ¶ [0033], [0036])

3. The computer program for controlling the CPU may be stored upon such computer usable media as “a distributed magnetic disk, an optical disk, semiconductor memory, or other recording media, or distributed over a network” (Spec. ¶¶ [0019], [0035]).

Nishino

4. Nishino teaches the use of a private-use word dictionary that is temporarily used in the translation process of an e-mail message in an electronic-mail system, wherein the private-use word dictionary is initially registered by a user, temporarily stored, and shared with other users. After the step of translating the e-mail message, the private-use word dictionary is deleted (Fig. 5A; col. 4, ll. 9-21, col. 9, ll. 13-38).

Shimohata

5. Shimohata teaches a collaborative session that populates a dedicated dictionary 140 for use of each chat group, wherein the dedicated dictionary 140 is populated by any person in the corresponding chat group (Fig. 27, col. 16, ll. 12-19).

PRINCIPLES OF LAW

Under § 101, there are four categories of subject matter that are eligible for patent protection: (1) processes; (2) machines; (3) manufactures;

and (4) compositions of matter. 35 U.S.C. § 101. But even if a claim fits within one or more of the statutory categories, it may not be patent eligible. *In re Ferguson*, 558 F.3d 1359, 1363 (Fed. Cir. 2009).

“[A]n applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article” into a different state or thing. *In re Bilski*, 545 F.3d 943, 961 (Fed. Cir. 2008) (en banc), *cert. granted*, 77 U.S.L.W. 3442, 3653, 3656 (U.S. June 1, 2009) (No. 08-964); *see also Gottschalk v. Benson*, 409 U.S. 63, 70 (1972).

“[A] machine is a concrete thing, consisting of parts, or of certain devices and combination of devices. This includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result.” *Ferguson*, 558 F.3d at 1364 (quoting *In re Nuijten*, 500 F.3d 1346, 1355 (Fed. Cir. 2007), *reh’g denied en banc*, 515 F.3d 1361 (Fed. Cir. 2008), *cert. denied*, 129 S. Ct. 70 (2008) (internal quotations omitted)).

Our reviewing court has found that transitory, propagating signals such as carrier waves are not within any of the four statutory categories (process, machine, manufacture or composition of matter.) Therefore, a claim directed to computer instructions embodied in a signal is not statutory under 35 U.S.C. § 101. *In re Nuijten*, 500 F.3d 1346, 1354 (Fed. Cir. 2007.)

On the issue of obviousness, the Supreme Court has stated that “the obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). Further, the Court stated “[t]he combination of familiar elements according to known methods is likely to be obvious when

it does no more than yield predictable results.” *Id.* at 416. “One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *Id.* at 419-420.

The determination of obviousness must consider, *inter alia*, whether a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and whether there would have been a reasonable expectation of success in doing so. *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1125 (Fed. Cir. 2000). Where the teachings of two or more prior art references conflict, the Examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991). If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). Further, our reviewing court has held that “[a] reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994); *Para-Ordinance Mfg., Inc. v. SGS Importers Int’l, Inc.*, 73 F.3d 1085, 1090 (Fed. Cir. 1995).

ANALYSIS

Section 101 rejection of Claims 13 and 19

We select claim 13 as representative of this group of claims, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii).

Independent claim 13 recites “[a] computer program product for causing a computer to translate a text in a first language into a second language, the computer program product comprising: a computer usable medium having computer usable program code embodied therewith.”

Appellant argues that “[w]hen functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionality interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” (App. Br. 7).

The Examiner finds that the claims are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter since the computer usable medium is not specifically a storage medium and can be interpreted as a magnetic carrier wave or signal, both of which are non-statutory under 35 U.S.C § 101 (Ans. 3). The Examiner finds that even though the Specification suggests that the computer usable medium may be a CD-ROM or DVD-ROM, the Specification also suggests that “other configurations are possible as well” (Ans. 17, FF 2). The Examiner therefore finds that the computer usable medium is open to any reasonable interpretation and that one of ordinary skill in the art can appreciate that a computer usable medium can be interpreted as a carrier wave or a network signal, both of which are considered non-statutory under 35 U.S.C. § 101 (Ans. 17).

The issue thus turns on whether the Examiner properly determined that the “computer usable medium” as it is recited in independent claim 13 implicates a carrier wave or a network signal, both of which are considered non-statutory.

Computer programs and data structures are deemed “functional descriptive material,” which impart functionality when employed as a computer component. When functional descriptive material is recorded on some (*tangible*) computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. *Compare In re Lowry*, 32 F.3d 1579, 1583-84 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) with *In re Warmerdam*, 33 F.3d 1354, 1361-62 (Fed. Cir. 1994) (claim to computer having a specific data structure stored in memory held statutory product-by-process claim but claim to a data structure that referred to ideas reflected in nonstatutory process rather than referring to a physical arrangement of the contents of a memory held nonstatutory).

“A transitory, propagating signal [however] . . . is not a ‘process, machine, manufacture, or composition of matter.’ [These] four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.’ *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007). Specifically, signals are unpatentable as failing a *tangibility* requirement to be “manufactures” because they are not *tangible* media. *In re Nuijten* 500 F.3d at 1366 (emphasis added).

Referring to the Examiner's finding that the Specification also suggests that "other configurations are possible as well," we find that the Specification teaches in particular that "various other [*hardware*] configurations are possible" (FF 2 (emphasis added)). Since hardware is a *tangible* medium, we find that the reference to "various other [*hardware*] configurations" meets the tangibility requirement to be a manufacture (FF 2 (emphasis added)).

Thus, based upon the Specification as a whole, we find that Appellant's description of a 'computer usable medium' is based upon *tangible storage media*, such as a server, floppy drive 109, main memory 103 and hard disk 105 as specified by Appellant (App. Br. 4; FF 2, 3 (emphasis added)).

We find that the Examiner erred in finding that the cited claims implicate the use of carrier waves that embody a machine executable program or data structure. Therefore, since Appellant's independent claim 13 is limited to being recorded on a (*tangible*) computer-readable medium, we reverse the Examiner's rejection of independent claim 13 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter, as well as that of dependent claim 19.

Section 103 rejection of claims 1, 3, 5-7, 10, 11, 13, and 19

We select claim 1 as representative of this group of claims, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii).

Appellant contends that since an email message is not the same as a collaborative session, there would be no logical basis for combining Nishino and Shimohata since Nishino teaches the use of a temporary dictionary file for *email* messages and Shimohata teaches the use of a dictionary for

translation during a collaborative (*chat*) session (App. Br. 5 (emphasis added)). Appellant contends that even if the email message constituted part of a collaborative session, Nishino does not teach the claimed limitation that the dictionary be deleted at the end of a collaborative session, since the temporary dictionary of Nishino is not available for the *entire* session (App. Br. 5 (emphasis added)). Appellant contends further that there is no language in Shimohata that indicates the user-specific dictionaries are acquired at the beginning of a collaborative session or are erased at the end of the collaborative session (App. Br. 6).

The Examiner finds Nishino teaches a translation processing unit, a dictionary storage unit that includes a virtual dictionary file, wherein the dictionary storage unit is created when the session begins and erased when the session ends (Ans. 4, 15, FF 4). The Examiner finds that Shimohata teaches a collaborative session that populates a dedicated dictionary for use of each chat group which would inherently be deleted when the session ends (Ans.4-5, 15-16, FF 5). Hence, the Examiner finds that the combination of the teachings of Nishino and Shimohata would yield a translation server that translates text during a collaborative session, wherein a virtual dictionary is created at the start of a collaborative session and erased at the end of the collaborative session, as recited in claim 1 (Ans. 4-5). The Examiner characterizes email as a collaborative tool, wherein sending an email can be considered a collaborative session (Ans. 15).

We agree with the Examiner that email is, in general, a collaborative tool. When email is sent by one person to another, the recipient of that email can choose to respond or not. If the recipient has chosen not to respond, the “collaborative session” has ended. Hence, Nishino does teach the claimed

limitation that the dictionary be deleted at the end of a “collaborative session.” Further, we agree with the Examiner that one skilled in the art would have been motivated to combine the teachings to yield a translation server that translates text during a collaborative session, wherein a virtual dictionary is created at the start of a collaborative session and erased at the end of the collaborative session as recited in claim 1 (Ans. 4-5; FF 4, 5).

We, therefore, find no error in the Examiner’s rejection of claim 1 under 35 U.S.C. § 103, nor that of claims 3, 5-7, 10, 11, 13, and 19 not separately argued with particularity.

CONCLUSIONS OF LAW

Appellant has shown that the Examiner erred in finding that the scope of claims 13 and 19 are intended to include embodiments where the ‘computer usable medium’ may include a carrier wave or signal which are non-statutory subject matter.

Appellant has not shown that the Examiner erred in finding that the combination of Nishino and Shimohata discloses a translation server for translating entered text during a collaborative session using a dictionary storage unit that includes a virtual dictionary file created at the start of the collaborative session and erased from the dictionary storage unit at the end of the collaborative session.

ORDER

The Examiner’s rejection of claims 1, 3, 5-7, 10, 11, 13, and 19 is affirmed.

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Application 10/726,443

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

ELD

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